

IN THE CLAIMS:

Please amend claims 1, 2 and 3 as follows:

1. (Currently Amended) A method of fabricating a semiconductor device, said method comprising the steps of:

preparing a single crystal semiconductor substrate having a main surface of a {110} ~~surface~~ plane;

forming an oxide layer in the single semiconductor substrate;

adding hydrogen into the single semiconductor substrate from a side of the main surface through the oxide layer to form a hydrogen-containing layer in the single crystal semiconductor substrate;

bonding the single crystal semiconductor substrate and a supporting substrate to each other;

separating the single crystal semiconductor substrate by a first heat treatment along the hydrogen-containing layer;

polishing a single crystal semiconductor layer remaining on the supporting substrate and having a main surface of a {110} plane; and

forming an active layer of a thin film transistor by using the single crystal semiconductor layer.

2. (Currently Amended) A method of fabricating a semiconductor device, said method comprising the steps of:

preparing a single crystal semiconductor substrate having a main surface of a {110} ~~surface~~ plane;

first oxidizing the single crystal semiconductor substrate to form a porous semiconductor layer;

carrying out a first heat treatment on the porous semiconductor layer in a reducing atmosphere;

carrying out an epitaxial growth of a first single crystal semiconductor layer having a main surface of a {110} plane on the porous semiconductor layer;

second oxidizing the first single crystal semiconductor layer to form an oxide layer, wherein a remaining portion in the first single crystal semiconductor layer which is not oxidized in the second oxidizing step is defined as a second single crystal semiconductor layer;

bonding the single crystal semiconductor substrate and a supporting substrate to each other;

polishing the single crystal semiconductor substrate until the porous semiconductor layer is exposed;

removing the porous semiconductor layer to expose the second single crystal semiconductor layer; and

forming an active layer of a thin film transistor by using the single crystal semiconductor layer over the supporting substrate.

3. (Currently Amended) A method of fabricating a semiconductor device, said method comprising the steps of:

preparing a single crystal semiconductor substrate having a main surface of a {110} surfaee plane;

adding oxygen ions into the single semiconductor substrate from a side of the main surface to form an oxygen-containing layer in the single crystal semiconductor substrate ;

converting the oxygen-containing layer into a buried oxide layer by a heat treatment, wherein a single crystal semiconductor layer having a main surface of a {110} plane remains on the buried oxide layer; and

patterning the single crystal semiconductor layer to form an active layer of a thin film transistor.

4. (Original) A method according to claim 1, wherein the single crystal semiconductor layer is a single crystal silicon layer.

5. (Original) A method according to claim 1, wherein the semiconductor device is one selected from the group consisting of a liquid crystal display device, an EL display device, an EC display device, and a photoelectric conversion device.

6. (Original) A method according to claim 1, wherein the semiconductor device is one selected from the group consisting of a video camera, a digital camera, a projector, a projection TV, a goggle type display, a car navigation system, a personal computer, and a portable information terminal.

7. (Original) A method according to claim 2, wherein the single crystal semiconductor layer is a single crystal silicon layer.

8. (Original) A method according to claim 3, wherein the single crystal semiconductor layer is a single crystal silicon layer.

9. (Original) A method according to claim 2, wherein the semiconductor device is one selected from the group consisting of a liquid crystal display device, an EL display device, an EC display device, and a photoelectric conversion device.

10. (Original) A method according to claim 3, wherein the semiconductor device is one selected from the group consisting of a liquid crystal display device, an EL display device, an EC display device, and a photoelectric conversion device.

11. (Original) A method according to claim 2, wherein the semiconductor device is one selected from the group consisting of a video camera, a digital camera, a projector, a projection

TV, a goggle type display, a car navigation system, a personal computer, and a portable information terminal.

12. (Original) A method according to claim 3, wherein the semiconductor device is one selected from the group consisting of a video camera, a digital camera, a projector, a projection TV, a goggle type display, a car navigation system, a personal computer, and a portable information terminal.

13. (Previously Presented) A method according to claim 1, further comprising the step of:
carrying out a second heat treatment at a temperature of not lower than 900°C.

14. (Previously Presented) A method according to claim 2, further comprising the step of:
carrying out a second heat treatment at a temperature of not lower than 900°C.